Fusion3

EDGE 3D Printer
F200 3D Printer

USER INTERFACE WALK-THROUGH

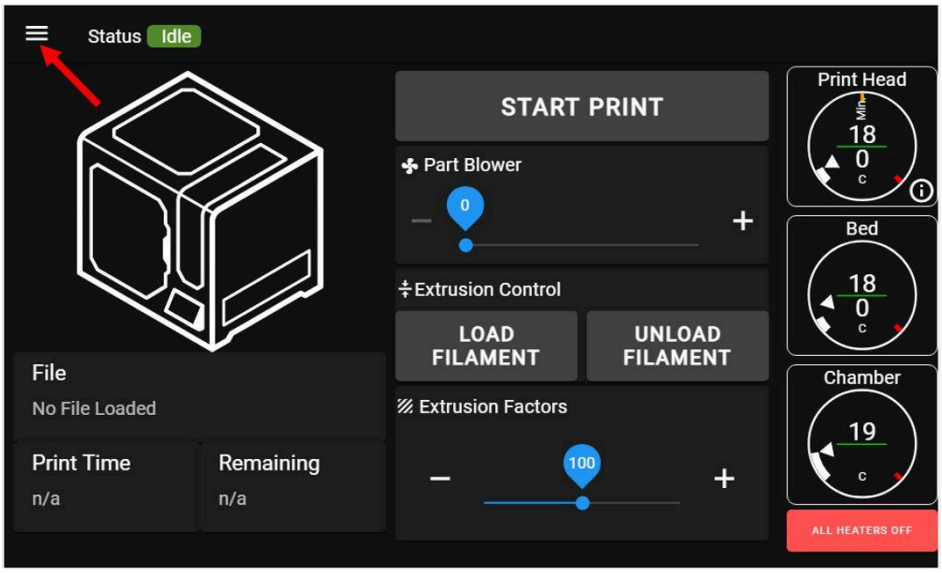
Revision 7/1/2025

USER INTERFACE WALK-THROUGH

The basics of the EDGE & F200 user interface and its use.

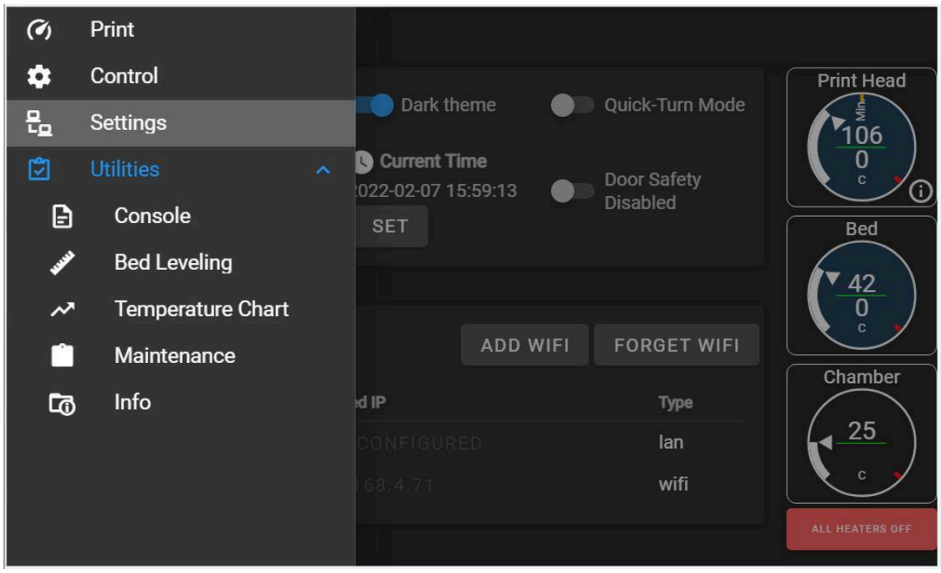
INTRODUCTION

The user interface is divided into "pages" or "screens". Each screen has a specific purpose and gives you access to various controls and information about your printer.



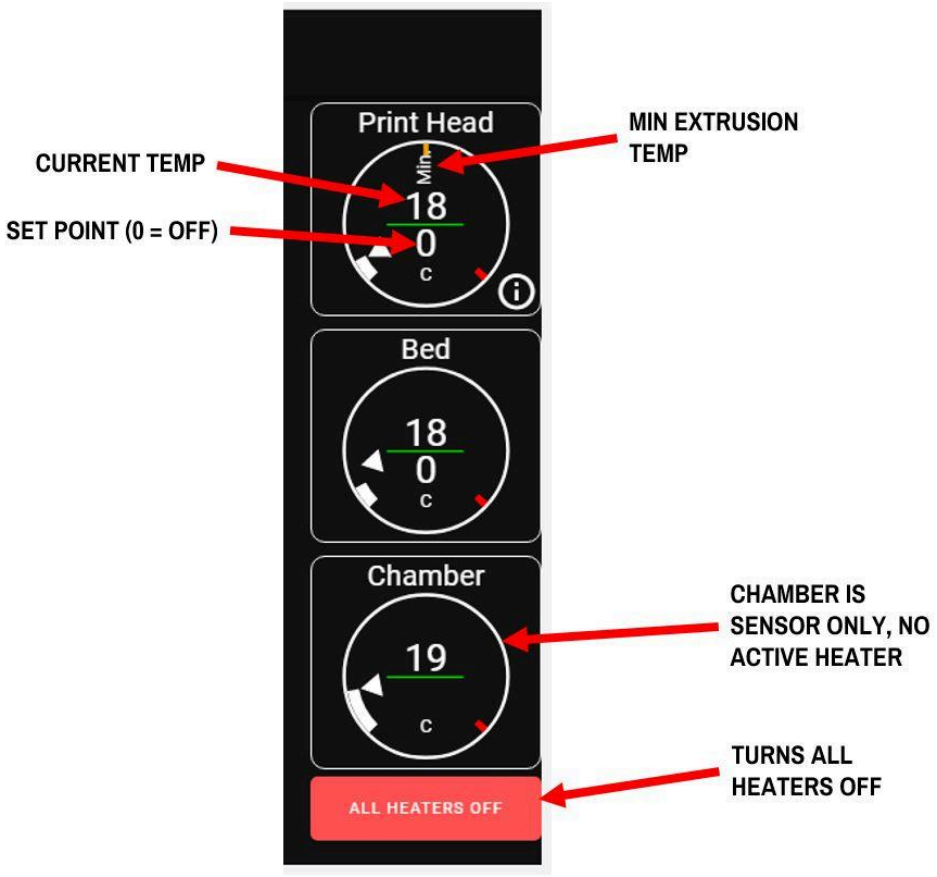
The user interface you see on the built-in LCD is the same as what you'll see if you connect to the printer over your local network using a computer or tablet. On some screens we take advantage of additional screen size to show a few more options or more information, but fundamentally users are shown the same information at all times.

To access the different screens, press the menu icon (3 horizontal lines) in the top left corner of the screen. On computers and larger displays, the menus are shown all the time on the left side.



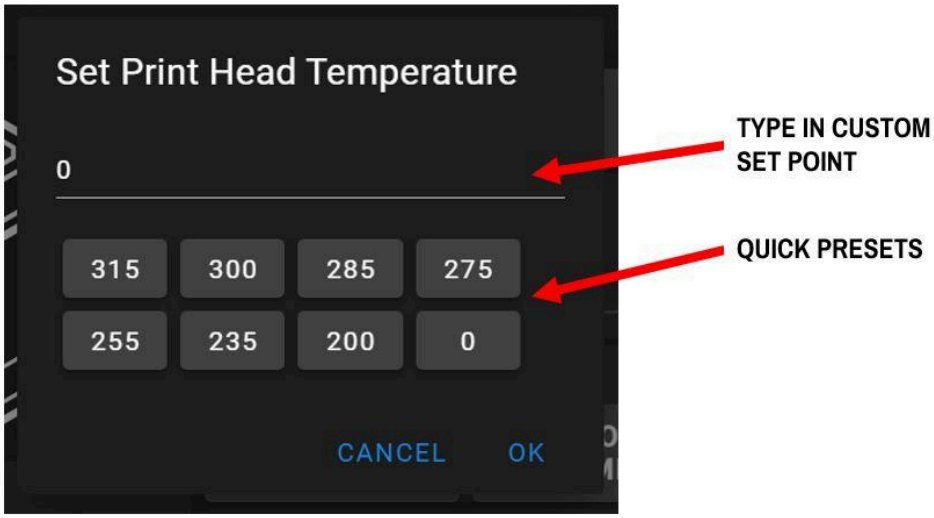
TEMPERATURE CONTROLS

All screens keep the temperature controls and readouts shown on the right hand side. This is a safety measure so that you can know the current temperature of potentially hot components at a glance at all times.

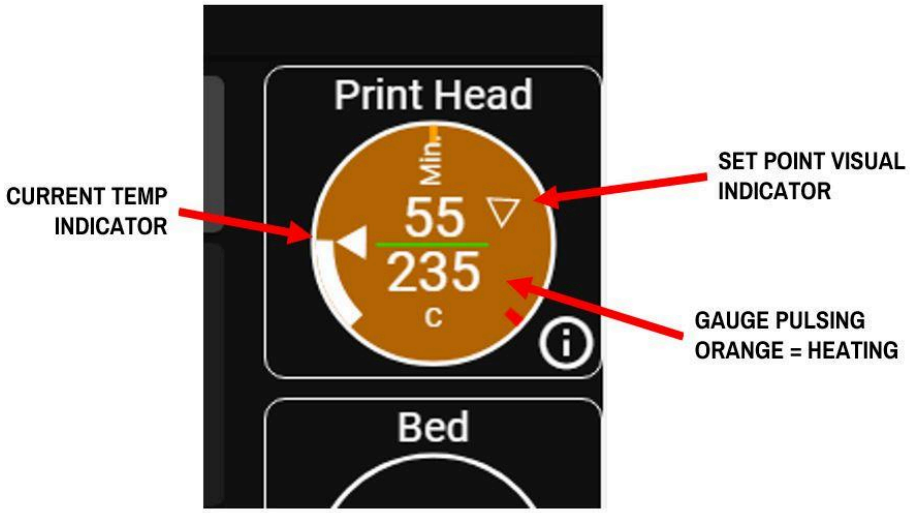


- In each temperature dial, the current temperature is shown on top.
- The bottom number is the current set point.
- A set point of 0 means the heater is off.
- The gauge around the perimeter gives a visual indication of the current temperature and set point.
- The "min" line in the print head temperature gauge shows the minimum print head temperature for extrusion of filament to be allowed.

Touching a temperature gauge will bring up a dialogue box where you can manually adjust the current set point. You can do this when the printer is idle, and also during a print.



The temperature gauges have a few colors they will display during operation:



- Black background: component is cold (below 40C) and heater is off.
- Pulsing orange background: component is heating up to a set point.
- Solid orange: component is hot, use caution if you're sticking a hand or other body part in the machine.
- Pulsing blue: heater is off, component is cooling down.
- Pulsing red: heater is in a fault state.

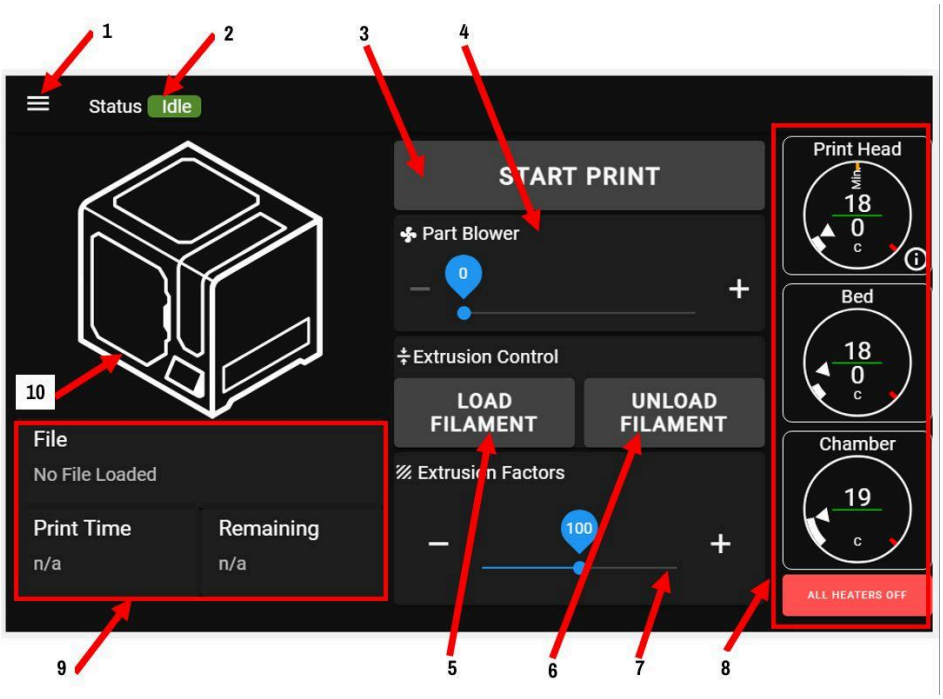
The red "ALL HEATERS OFF" button is a quick way for you to immediately turn both heaters off and begin cooling down the print head and bed.

PRINT SCREEN (Idle)

This is the main screen that the printer defaults to when it powers up.

From this screen you can start a print, load filament, and view basic status information about the printer and what it's doing at the moment.

This screen will change slightly when a print is running.

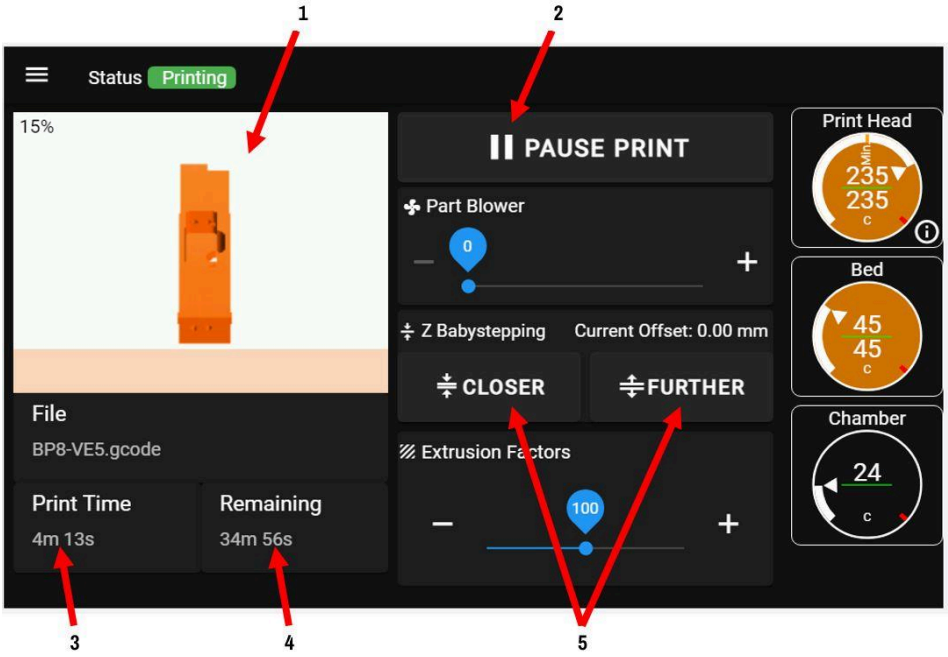


1. Menu icon: press to show/hide menu tree
2. General status indicator (idle, busy, printing)
3. Start print button: press to upload a print, or to start a print
4. Part blower control: use to manually set the speed of the part cooling blower
5. Load filament: press to begin the process to load filament into the print head

6. Unload filament: press to begin the process to unload filament from the print head
7. Extruder flow control: used to adjust the relative flow rate of material out of the extruder
8. Temperature indicators region: always shown for safety
9. Status graphic: shows various icons during certain actions, and displays print progress during a print
10. Print information region: shows information about a print when one is running

PRINT SCREEN (During a Print)

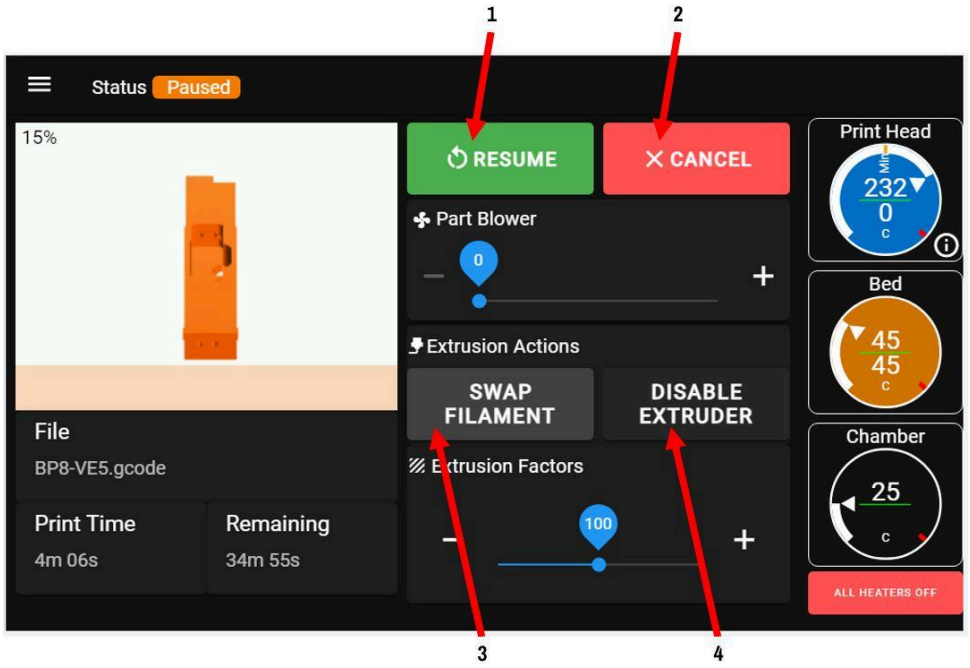
When a print is running, the options available to you change.



1. Preview image of print in progress
2. Pause print button (unavailable during the start-of-print sequence)
3. Elapsed print time
4. Estimated print time remaining (will show n/a until the printer is able to calculate a realistic estimate)
5. Babystepping controls

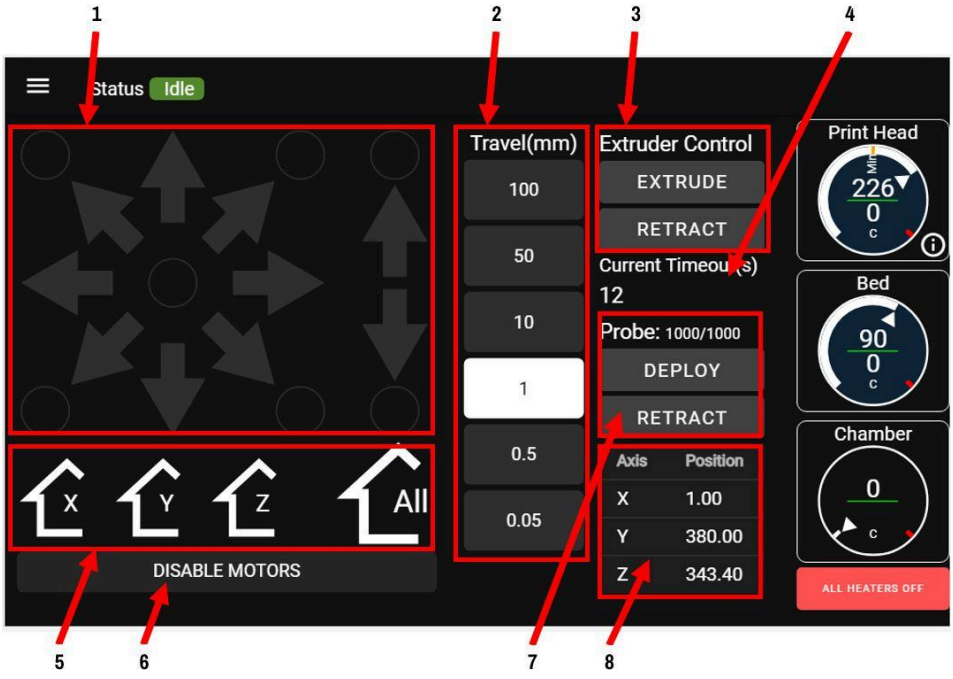
When a print is paused:

1. Resume print
2. Cancel print
3. Swap filament
4. Disable the extruder motor so it can be turned by hand



CONTROL SCREEN

The control screen is where you can manually home each axis and "jog" it around. It also shows you readouts on where the printer is in 3D space, the filament monitor timeout, and bed probe controls & readouts.

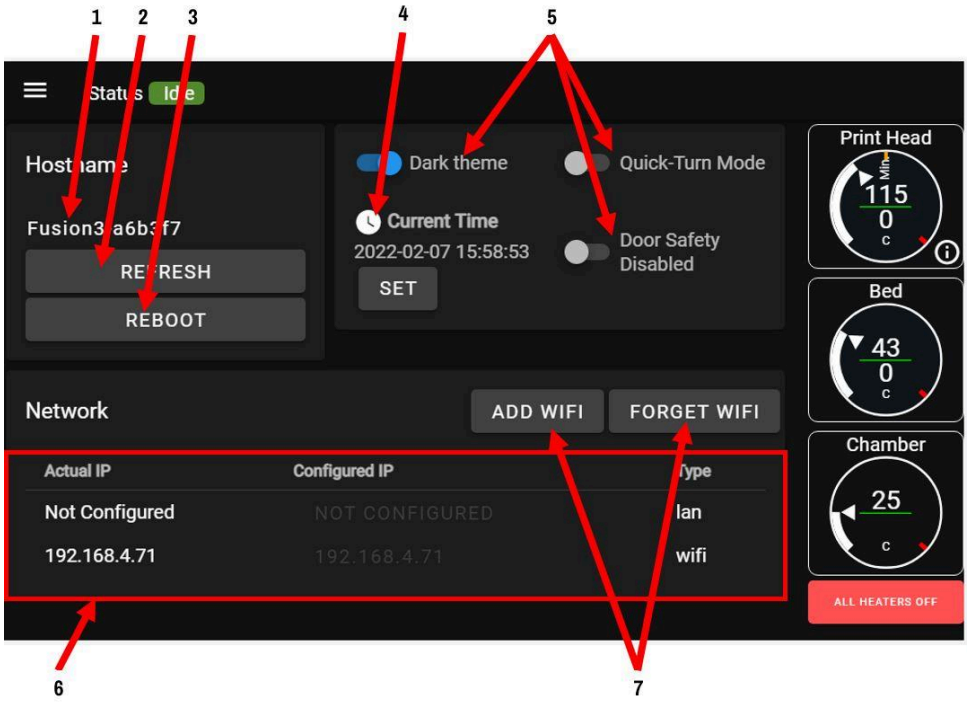


1. Jog controls: Axes must be homed to use these. Use the arrows in combination with the Travel Increment selector to move axes around.
    a. The "star" of arrows moves X and Y.
    b. The up and down arrows move Z.
    c. The dots move the axes to predefined points in space (all axes must be homed first).
        i. Press the center dot to move the print head to the center of X, Y.
        ii. Press the bottom dot to move the Z axis all the way down.
2. Travel increment: Select how far you want the axis to move for each arrow press.

3. Extruder controls: Allows you to manually extrude or retract filament. NOTE: Print head must be above 160C for these to work.
4. Shows the current timeout for the filament monitor. Lower number = more sensitive. Press this to adjust the timeout value. If you're having false filament feed errors, consider increasing this value.
5. Press to home individual or all axes. Please note that to home X, Y must be homed first due to the location of the endstops (if you press Home X this will happen automatically).
6. Disable motors: disables all X, Y, Z, E and bed probe motors.
7. Probe controls: Allows you to deploy or retract the probe, as well as view the probe's raw output (not available during a print).
8. Axis position readout: Shows you where the printer thinks it is in 3D space. NOTE: if you have not homed an axis, the readout will show 0 regardless of where the axis actually is.

SETTINGS SCREEN

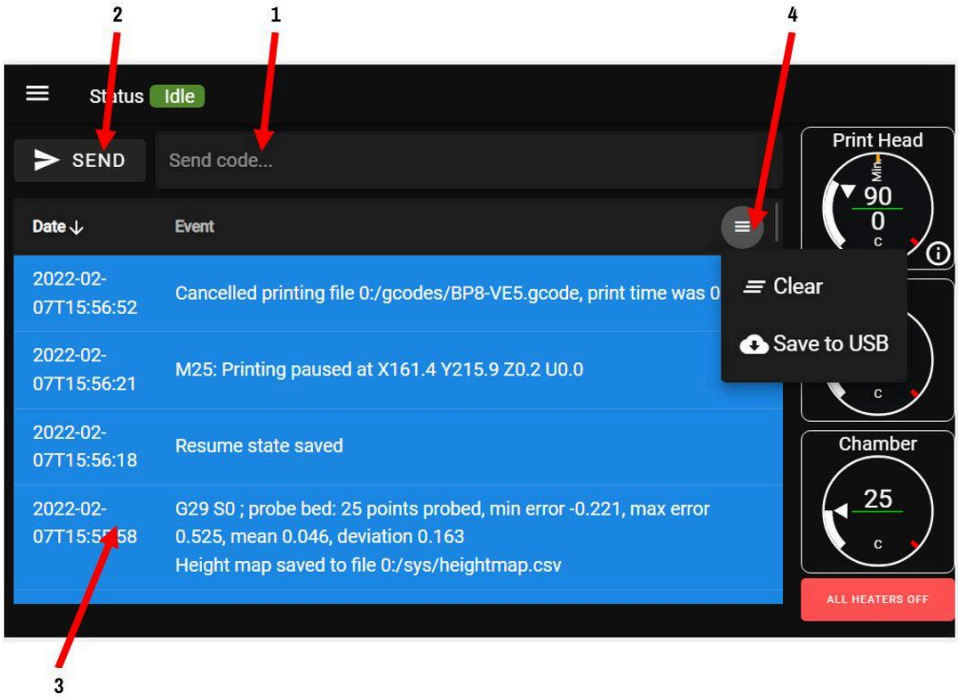
This screen shows you network information, network controls, and system mode switches. Use this page to connect your printer to a wired or wireless network.



1. Displays the name the printer is using on any network it's connected to.
2. Press to reload the interface after updating UI files.
3. Press to reboot the interface (used for troubleshooting or to make certain changes take effect).
4. System time (press SET to adjust).
5. System mode switches.
6. Network settings: covered in more detail in our sections on configuring networks. This will list all active or configured networks on the printer. You can also change network settings by selecting the network in the list.
7. Buttons to add or remove a wireless network.

CONSOLE SCREEN

The console is used to view the direct output of the printer, or to send it individual gcode commands. This is useful for advanced users, as well as for support, diagnostic, and troubleshooting. In normal use you will rarely need this screen.

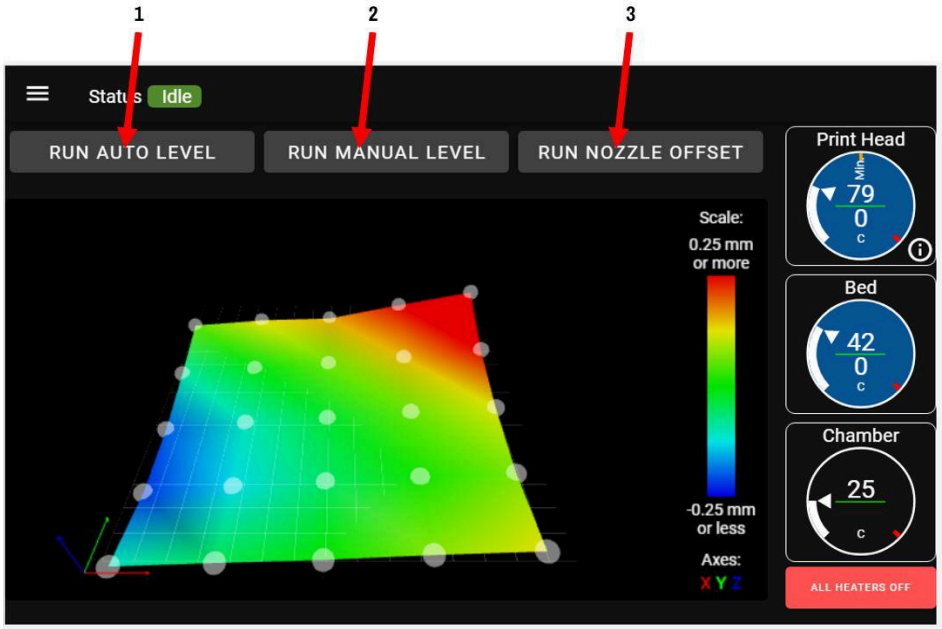


1. Command entry line: enter your gcode commands here.
2. Send button: makes the printer execute the command you entered in the entry line.
3. Console log: shows the history of input and output from the printer. This is saved as a log file on the device as well.
4. Console menu: press to access options for the log.
    a. Clear: clears the history shown to you (but does not affect the system log).
    b. Download the console log as a text file or csv file.

NOTE ON 4(b): If you're using the printer from a computer over the network, this will download a file to your computer. If you're using the onboard LCD, this will attempt to dump the log file to a thumb drive, if one is plugged into the front USB port (EDGE) or rear USB port (F200).

BED LEVELING SCREEN

This screen shows you the last bed level results and also gives you access to bed leveling functions. All of these functions are covered in more detail in our bed leveling section.

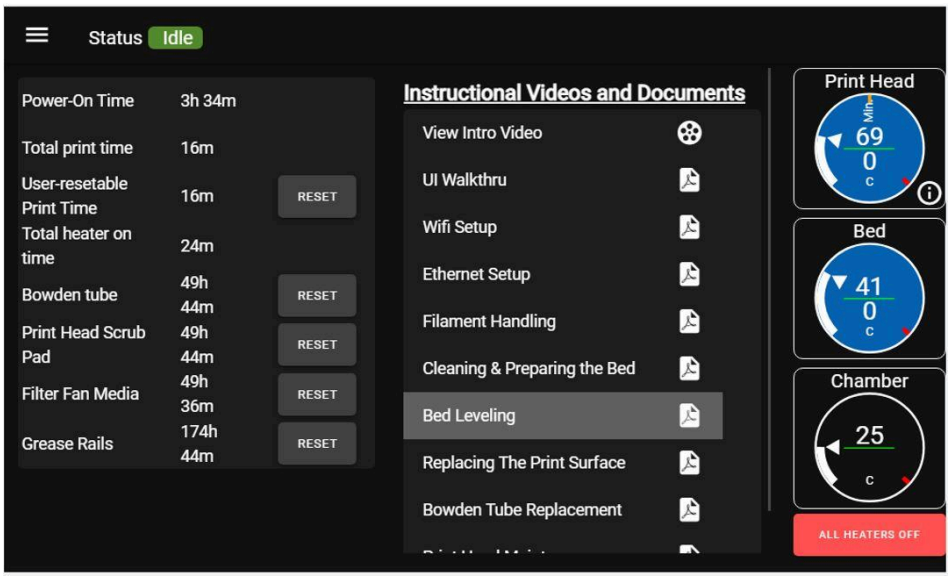


1. Run the auto level sequence to quickly probe the bed and see the result in the section below.
2. (Deprecated) Run the manual bed leveling macro
3. Run the nozzle offset macro

TEMPERATURE CHART SCREEN

This screen is rarely needed in normal operation. However it can be very useful to diagnose heater or temperature sensor malfunctions. This screen plots the temperature of the bed and print head over time.

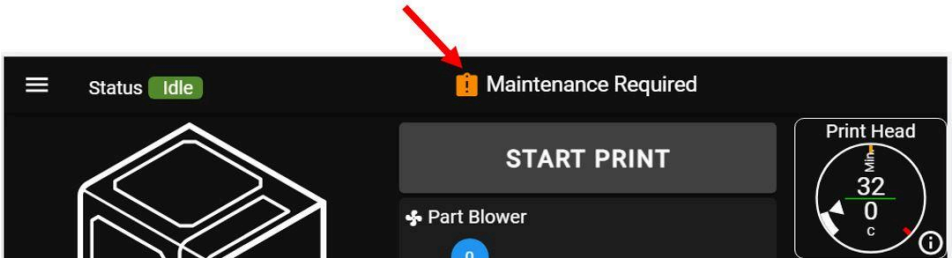
MAINTENANCE SCREEN



This screen serves two main purposes:

1. To show the timers for various important maintenance items.
2. (deprecated) To show selected support documentation for important or frequently-needed topics.

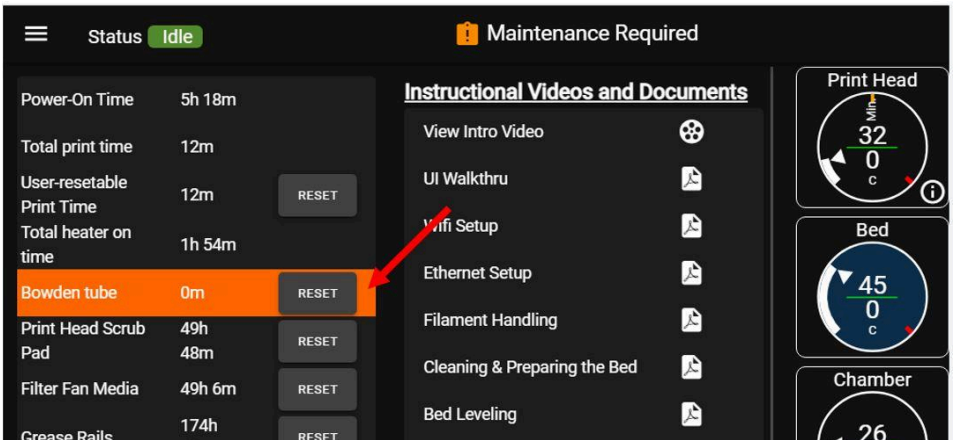
Maintenance Timers



The first 4 timers track printer run time or various parameters of it. These count up from 0. The other timers are maintenance timers that count down from a preset value. When these reach 0, you will get a maintenance reminder that certain maintenance items need to be performed in order to keep your printer in optimal operating condition.

(Deprecated) Help Documents

A list of onboard help documents for common tasks and maintenance items.



INFO SCREEN

This screen shows firmware and software versions, contact information for Fusion3, and a button to download your printer's system files.

The "copy system files" button will download a copy of your printer's system files in a zip file to your computer.